

SUMMARY OF WATER CONDITIONS

April 1, 2004

March turned out to be dry and unusually warm, setting new monthly temperature records at a number of weather stations. The combination caused early snowmelt and about a 25 percent loss in snowpack water content during the month. As a result, April through July runoff forecasts were reduced about 20 percent from those of last month. Runoff forecasts in the Sacramento River region are still near historic median levels, but southern Sierra river runoff is expected to be considerably below normal. There is enough snowpack and water in storage to avoid drought for this year, but supplies may be short in some areas in the southern part of the Central Valley.

Forecasts of April through July runoff are about 80 percent of average overall, ranging from above normal in a few northern basins to under 60 percent in several southern Sierra basins. Water year runoff forecasts, which include the past winter season, are slightly better at 85 percent of average statewide.

Snowpack water content dropped about 25 percent during March and now stands at 85 percent of average statewide. Much of the lower elevation snow melted swelling streamflow more than would be expected with the limited amount of rain. Last year the snowpack was 65 percent of average on April 1, but showed an unusual gain of 15 percent during the following wet April.

Precipitation from October 1 through March was about 95 percent of average, lowered 10 percent by the dry March. Last year precipitation stood at 100 percent at this time. Precipitation during March was about 40 percent of average statewide from small storms near the beginning and end of the month. The three weeks between were bone dry in all regions of the State.

Runoff for the first six months has been just below average at 90 percent. Last year runoff on this date was 95 percent of average. March runoff overall was near normal at 95 percent, but with a profound difference from relatively dry rain fed streams to above average in many snow fed rivers. Estimated runoff of the eight major rivers of the Sacramento and San Joaquin River regions was 3.6 million acre-feet during March.

Reservoir storage gained about 1.6 million acre-feet during the month, about the normal increase and 105 percent of average for the date. More storage at several northern California reservoirs was precluded by the need to maintain required seasonal flood control space. Reservoir storage one year ago was a little less at 100 percent.

SUMMARY OF WATER CONDITIONS IN PERCENT OF AVERAGE

| HYDROLOGIC REGION | PRECIPITATION OCTOBER 1 TO DATE | April 1 SNOW WATER CONTENT | April 1 RESERVOIR STORAGE | RUNOFF OCTOBER 1 TO DATE | APR-JULY RUNOFF FORECAST | WATER YEAR RUNOFF FORECAST |
|---------------------------|---------------------------------------|-------------------------------|---------------------------------|--------------------------------|-----------------------------|----------------------------------|
| NORTH COAST | 105 | 110 | 110 | 100 | 105 | 105 |
| SAN FRANCISCO BAY | 110 | -- | 95 | 95 | -- | -- |
| CENTRAL COAST | 85 | -- | 80 | 55 | -- | -- |
| SOUTH COAST | 60 | -- | 85 | 35 | -- | -- |
| SACRAMENTO RIVER | 100 | 85 | 110 | 95 | 85 | 90 |
| SAN JOAQUIN RIVER | 85 | 80 | 110 | 70 | 75 | 70 |
| TULARE LAKE | 80 | 65 | 90 | 70 | 65 | 65 |
| NORTH LAHONTAN | 85 | 80 | 50 | 80 | 70 | 70 |
| SOUTH LAHONTAN | 100 | 85 | 100 | 65 | 80 | 75 |
| COLORADO RIVER- DESERT | 85 | -- | -- | -- | -- | -- |
| STATEWIDE | 95 | 85 | 105 | 90 | 80 | 85 |

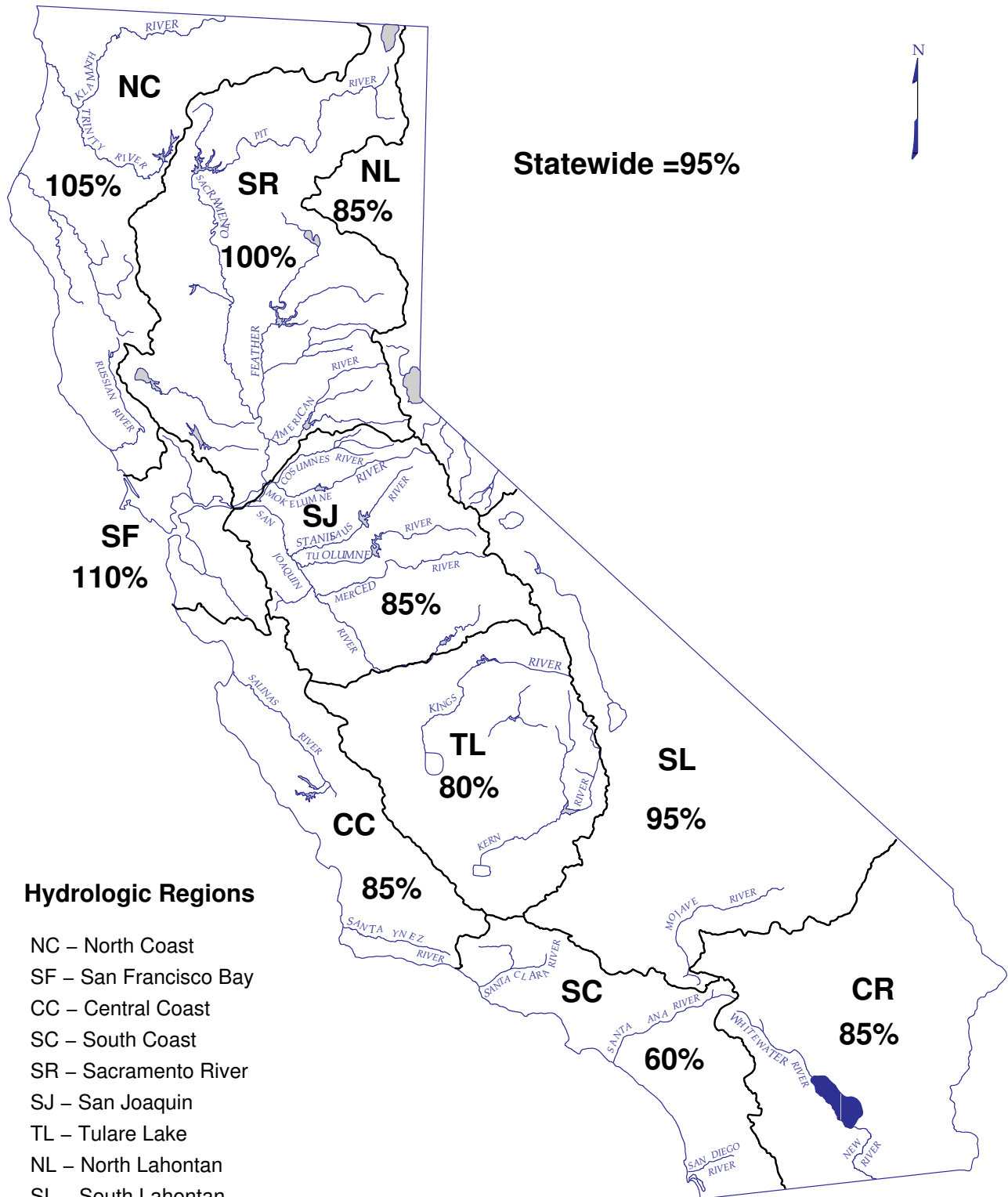
DEPARTMENT OF WATER RESOURCES

CALIFORNIA COOPERATIVE SNOW SURVEYS

SEASONAL PRECIPITATION

IN PERCENT OF AVERAGE TO DATE

October 1, 2003 through March 31, 2004

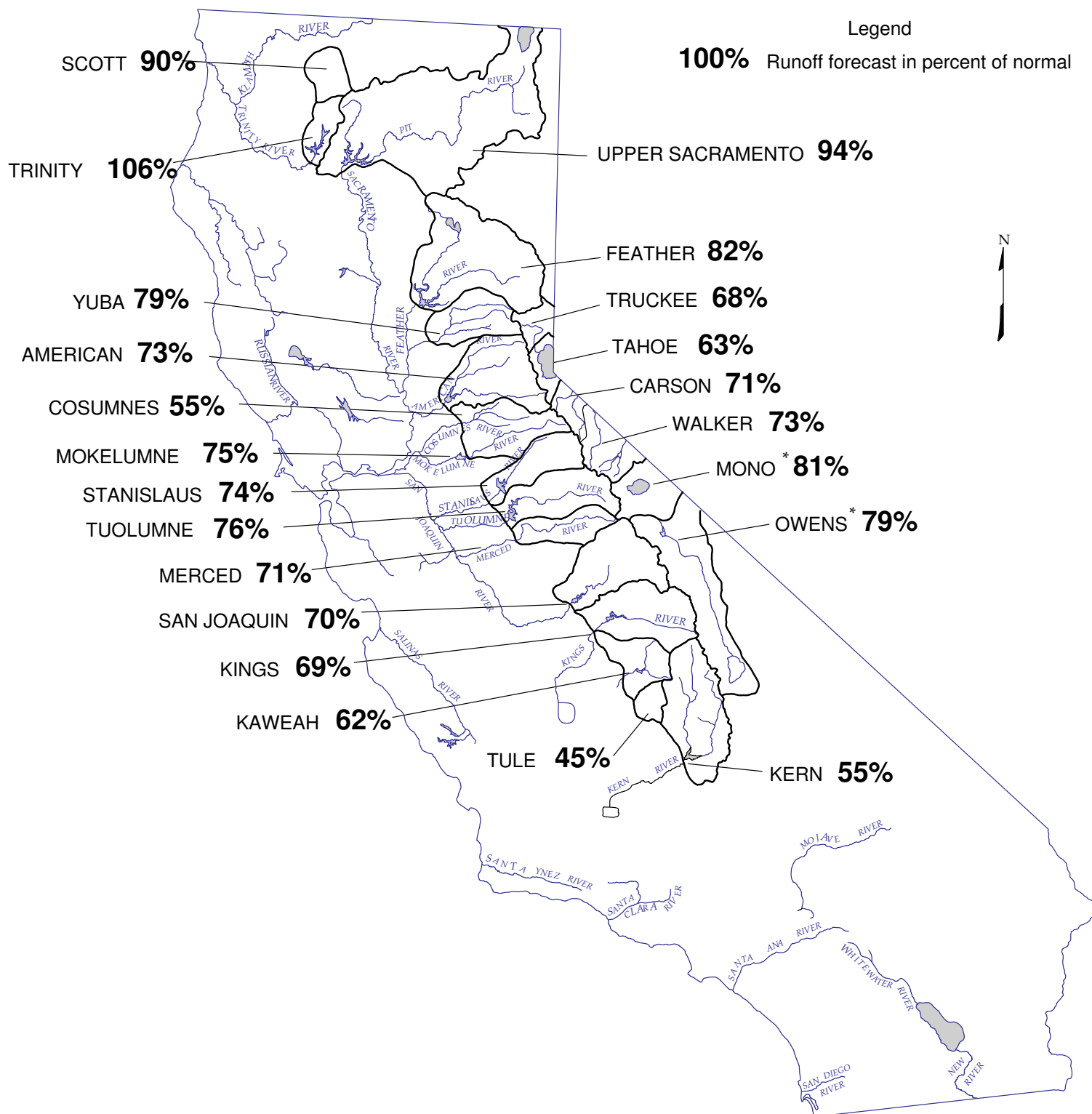


WATER YEAR IS OCTOBER 1 THROUGH SEPTEMBER 30

DEPARTMENT OF WATER RESOURCES CALIFORNIA COOPERATIVE SNOW SURVEYS

FORECAST OF APRIL – JULY UNIMPAIRED SNOWMELT RUNOFF

April 1, 2004



APRIL 1, 2004 FORECASTS
APRIL-JULY UNIMPAIRED RUNOFF

| HYDROLOGIC REGION and Watershed | Unimpaired Runoff in 1,000 Acre-Feet (1) | | | | | |
|-----------------------------------------------------------|------------------------------------------|---------------------|---------------------|----------------------|------------------|----------------------------------|
| | HISTORICAL | | | FORECAST | | |
| | 50 Yr Avg (2) | Max of Record | Min of Record | Apr-Jul Forecasts | Pct of Avg | 80 % Probability Range (1) |
| SACRAMENTO RIVER | | | | | | |
| Upper Sacramento River | | | | | | |
| Sacramento River at Delta above Shasta Lake (3) | 299 | 711 | 39 | 300 | 100% | |
| McCloud River above Shasta Lake | 400 | 850 | 185 | 410 | 103% | |
| Pit River near Montgomery Creek + Squaw Creek | 1,090 | 2,098 | 480 | 980 | 90% | |
| Total Inflow to Shasta Lake | 1,849 | 3,525 | 726 | 1,740 | 94% | 1,380 - 2,380 |
| Sacramento River above Bend Bridge, near Red Bluff | 2,521 | 5,075 | 943 | 2,380 | 94% | 1,860 - 3,300 |
| Feather River | | | | | | |
| Feather River at Lake Almanor near Prattville (3) | 333 | 675 | 120 | 270 | 81% | |
| North Fork at Pulga (3) | 1,028 | 2,416 | 243 | 830 | 81% | |
| Middle Fork near Clio (4) | 86 | 518 | 4 | 65 | 76% | |
| South Fork at Ponderosa Dam (3) | 110 | 267 | 13 | 90 | 82% | |
| Feather River at Oroville | 1,870 | 4,676 | 392 | 1,530 | 82% | 1,190 - 2,230 |
| Yuba River | | | | | | |
| North Yuba below Goodyears Bar (3) | 286 | 647 | 51 | 220 | 77% | |
| Inflow to Jackson Mdws and Bowman Reservoirs (3) | 112 | 236 | 25 | 90 | 80% | |
| South Yuba at Langs Crossing (3) | 233 | 481 | 57 | 180 | 77% | |
| Yuba River near Smartville plus Deer Creek | 1,044 | 2,424 | 200 | 830 | 79% | 660 - 1,200 |
| American River | | | | | | |
| North Fork at North Fork Dam (3) | 262 | 716 | 43 | 180 | 69% | |
| Middle Fork near Auburn (3) | 522 | 1,406 | 100 | 390 | 75% | |
| Silver Creek Below Camino Diversion Dam (3) | 173 | 386 | 37 | 140 | 81% | |
| American River below Folsom Lake | 1,282 | 3,074 | 229 | 940 | 73% | 730 - 1,420 |
| SAN JOAQUIN RIVER | | | | | | |
| Cosumnes River at Michigan Bar | 130 | 363 | 8 | 71 | 55% | 45 - 145 |
| Mokelumne River | | | | | | |
| North Fork near West Point (5) | 437 | 829 | 104 | 320 | 73% | |
| Total Inflow to Pardee Reservoir | 469 | 1,065 | 102 | 350 | 75% | 280 - 480 |
| Stanislaus River | | | | | | |
| Middle Fork below Beardsley Dam (3) | 334 | 702 | 64 | 250 | 75% | |
| North Fork Inflow to McKays Point Dam (3) | 224 | 503 | 34 | 170 | 76% | |
| Stanislaus River below Goodwin Reservoir (7) | 716 | 1,710 | 116 | 530 | 74% | 430 - 740 |
| Tuolumne River | | | | | | |
| Cherry Creek & Eleanor Creek near Hetch Hetchy (3) | 322 | 727 | 97 | 240 | 75% | |
| Tuolumne River near Hetch Hetchy (3) | 606 | 1,392 | 153 | 480 | 79% | |
| Tuolumne River below La Grange Reservoir (7) | 1,230 | 2,682 | 301 | 940 | 76% | 790 - 1,220 |
| Merced River | | | | | | |
| Merced River at Pohono Bridge (3) | 362 | 888 | 80 | 270 | 75% | |
| Merced River below Merced Falls (7) | 633 | 1,587 | 123 | 450 | 71% | 380 - 640 |
| San Joaquin River | | | | | | |
| San Joaquin River at Mammoth Pool (6) | 1,014 | 2,279 | 235 | 720 | 71% | |
| Big Creek below Huntington Lake (6) | 95 | 264 | 11 | 65 | 68% | |
| South Fork near Florence Lake (6) | 202 | 511 | 58 | 150 | 74% | |
| San Joaquin River inflow to Millerton Lake | 1,262 | 3,355 | 262 | 880 | 70% | 710 - 1,150 |
| TULARE LAKE | | | | | | |
| Kings River | | | | | | |
| North Fork Kings River near Cliff Camp (3) | 239 | 565 | 50 | 160 | 67% | |
| Kings River below Pine Flat Reservoir | 1,234 | 3,113 | 274 | 850 | 69% | 690 - 1,080 |
| Kaweah River below Terminus Reservoir | 290 | 814 | 62 | 180 | 62% | 145 - 255 |
| Tule River below Lake Success | 65 | 259 | 2 | 29 | 45% | 23 - 54 |
| Kern River | | | | | | |
| Kern River near Kernville (3) | 373 | 1,203 | 83 | 220 | 59% | |
| Kern River inflow to Lake Isabella | 470 | 1,657 | 84 | 260 | 55% | 195 - 370 |

(1) See inside back cover for definition

(2) All 50 year averages are based on years 1951-2000 unless otherwise noted

(3) 50 year average based on years 1941-90

(4) 44 year average based on years 1936-79

(5) 36 year average based on years 1936-72

(6) 45 year average based on years 1936-81

APRIL 1, 2004 FORECASTS
WATER YEAR UNIMPAIRED RUNOFF

| HISTORICAL | | | Unimpaired Runoff in 1,000 Acre-Feet (1) | | | | | | | | FORECAST | | |
|---------------------|---------------------|---------------------|------------------------------------------|----------|----------|-----|-----|-----|-----|-----------------|----------------------------|------------------|----------------------------------|
| 50 Yr Avg (2) | Max of Record | Min of Record | Oct Thru Jan* | Feb * | Mar * | Apr | May | Jun | Jul | Aug & Sep | Water Year Forecasts | Pct of Avg | 80 % Probability Range (1) |
| 888 | 1,965 | 165 | | | | | | | | | | | |
| 1,234 | 2,353 | 557 | | | | | | | | | | | |
| 3,217 | 5,150 | 1,484 | | | | | | | | | | | |
| 6,194 | 10,796 | 2,479 | 1,810 | 1,370 | 780 | 710 | 510 | 300 | 220 | 425 | 6,125 | 99% | 5,680 - 6,840 |
| 8,990 | 17,180 | 3,294 | 2,940 | 2,305 | 1,330 | 970 | 700 | 415 | 295 | 545 | 9,500 | 106% | 8,890 - 10,550 |
| 780 | 1,269 | 366 | | | | | | | | | | | |
| 2,417 | 4,400 | 666 | | | | | | | | | | | |
| 219 | 637 | 24 | | | | | | | | | | | |
| 291 | 562 | 32 | | | | | | | | | | | |
| 4,775 | 9,492 | 994 | 890 | 730 | 780 | 620 | 540 | 250 | 120 | 190 | 4,120 | 86% | 3,730 - 4,890 |
| 564 | 1,056 | 102 | | | | | | | | | | | |
| 181 | 292 | 30 | | | | | | | | | | | |
| 379 | 565 | 98 | | | | | | | | | | | |
| 2,459 | 4,926 | 369 | 380 | 315 | 325 | 350 | 305 | 145 | 30 | 35 | 1,885 | 77% | 1,700 - 2,310 |
| 616 | 1,234 | 66 | | | | | | | | | | | |
| 1,070 | 2,575 | 144 | | | | | | | | | | | |
| 318 | 705 | 59 | | | | | | | | | | | |
| 2,830 | 6,382 | 349 | 300 | 270 | 390 | 365 | 355 | 180 | 40 | 25 | 1,925 | 68% | 1,710 - 2,430 |
| 409 | 1,253 | 20 | 38 | 47 | 52 | 35 | 24 | 9 | 3 | 2 | 210 | 51% | 180 - 280 |
| 626 | 1,009 | 197 | | | | | | | | | | | |
| 774 | 1,800 | 129 | 60 | 45 | 105 | 110 | 155 | 75 | 10 | 5 | 565 | 73% | 490 - 700 |
| 471 | 929 | 88 | | | | | | | | | | | |
| 1,196 | 2,952 | 155 | 100 | 75 | 165 | 165 | 220 | 120 | 25 | 15 | 885 | 74% | 790 - 1,130 |
| 461 | 1,147 | 123 | | | | | | | | | | | |
| 770 | 1,661 | 258 | | | | | | | | | | | |
| 1,974 | 4,631 | 383 | 170 | 110 | 260 | 245 | 370 | 270 | 55 | 20 | 1,500 | 76% | 1,350 - 1,830 |
| 461 | 1,020 | 92 | | | | | | | | | | | |
| 1,014 | 2,787 | 150 | 65 | 60 | 120 | 125 | 195 | 105 | 25 | 15 | 710 | 70% | 630 - 920 |
| 1,337 | 2,964 | 308 | | | | | | | | | | | |
| 112 | 298 | 14 | | | | | | | | | | | |
| 248 | 653 | 71 | | | | | | | | | | | |
| 1,851 | 4,642 | 362 | 115 | 70 | 190 | 210 | 350 | 240 | 80 | 50 | 1,305 | 71% | 1,120 - 1,600 |
| 284 | 607 | 58 | | | | | | | | | | | |
| 1,736 | 4,287 | 386 | 100 | 55 | 170 | 190 | 345 | 240 | 75 | 40 | 1,215 | 70% | 1,040 - 1,470 |
| 460 | 1,402 | 94 | 34 | 18 | 48 | 50 | 75 | 45 | 10 | 10 | 290 | 63% | 250 - 370 |
| 153 | 615 | 16 | 15 | 9 | 15 | 14 | 10 | 3 | 2 | 2 | 70 | 46% | 60 - 100 |
| 558 | 1,577 | 163 | | | | | | | | | | | |
| 741 | 2,318 | 175 | 60 | 25 | 70 | 60 | 90 | 80 | 30 | 30 | 445 | 60% | 370 - 570 |

* Unimpaired runoff in prior months based on measured flows

(7) Forecast point names based on USGS gage names. Stanislaus below Goodwin also known as inflow to New Melones, Tuolumne River below La Grange also known as inflow to Don Pedro, Merced River below Merced Falls also known as inflow to McClure.

APRIL 1, 2004 FORECASTS
APRIL-JULY UNIMPAIRED RUNOFF

| HYDROLOGIC REGION and Watershed | Apr-Jul Unimpaired Runoff in 1,000 Acre-Feet (1) | | | | |
|------------------------------------|--------------------------------------------------|---------------------|---------------------|----------------------|------------------|
| | HISTORICAL | | | FORECAST | |
| | 50 Yr Avg (2) | Max of Record | Min of Record | Apr-Jul Forecasts | Pct of Avg |

NORTH COAST

Trinity River

Trinity River at Lewiston Lake (3) 660 1,593 80 **700** 106%

Scott River

Scott River near Fort Jones 200 400 30 **180** 90%

Klamath River

Total inflow to Upper Klamath Lake (4) 515 939 149 **340** 66%

NORTH LAHONTAN

Truckee River

Lake Tahoe to Farad accretions 272 713 52 **185** 68%

Lake Tahoe Rise (assuming gates closed, in ft) 1.4 5.4 0.2 **0.9** 63%

Carson River

West Fork Carson River at Woodfords 55 135 12 **40** 72%

East Fork Carson River near Gardnerville 190 407 43 **135** 71%

Walker River

West Walker River below Little Walker, near Coleville 153 330 35 **115** 75%

East Walker River near Bridgeport 65 209 7 **45** 69%

SOUTH LAHONTAN

Owens River

Total tributary flow to Owens River (5) 235 579 96 **186** 79%

APRIL 1, 2004 FORECASTS
WATER YEAR UNIMPAIRED RUNOFF

| HYDROLOGIC REGION and Watershed | Water Year Unimpaired Runoff in 1,000 Acre-Feet (1) | | | | | |
|------------------------------------|-----------------------------------------------------|---------------------|---------------------|----------------------------|------------------|----------------------------------|
| | HISTORICAL | | | FORECAST | | |
| | 50 Yr Avg (2) | Max of Record | Min of Record | Water Year Forecasts | Pct of Avg | 80 % Probability Range (1) |

NORTH COAST

Trinity River

Trinity River at Lewiston Lake (3) 1,411 2,990 200 **1,580** 112% 1420 - 1770

(1) See inside back cover for definition

(2) All 50 year averages are based on years 1951-2000 unless otherwise noted

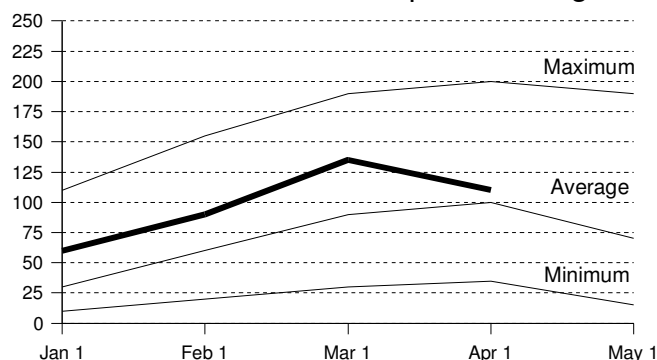
(3) Forecast by DWR and National Weather Service California-Nevada River Forecast Center.

(4) Forecast by U.S. Natural Resources Conservation Service and National Weather Service California-Nevada River Forecast Center. April through September forecast, 30 year average based on years 1971-2000.

(5) Forecast by Department of Water and Power, City of Los Angeles, average based on years 1951-2000.

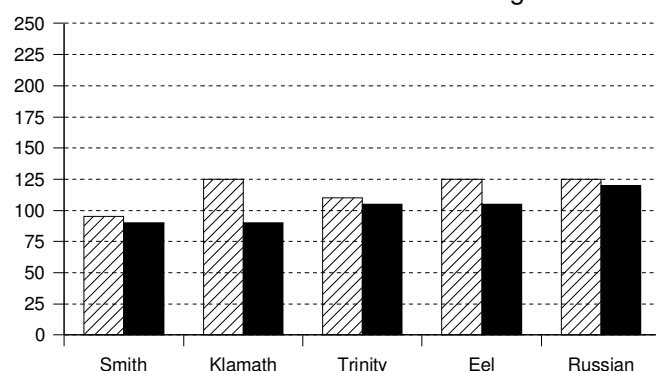
Snowpack Accumulation

Water Content in % of April 1 Average



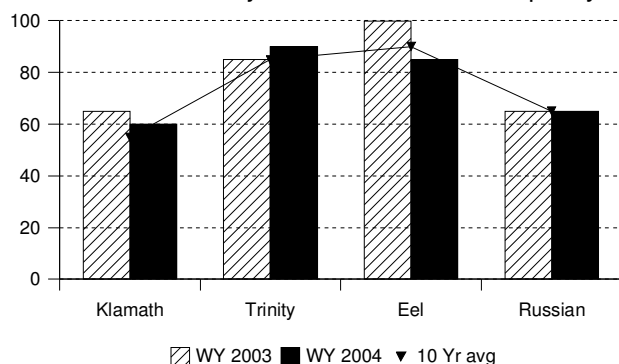
Precipitation

October 1 to date in % of Average



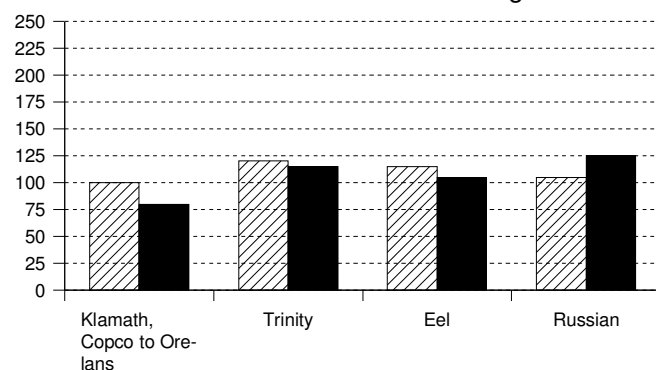
Reservoir Storage

Contents of major reservoirs in % of capacity



Runoff

October 1 to date in % of average



NORTH COAST REGION

SNOWPACK - First of the month measurements made at 18 snow courses indicate an area wide snow water equivalent of 33.8 inches. This is 110 percent of the April 1 average. Last year at this time the pack was holding 30 inches of water.

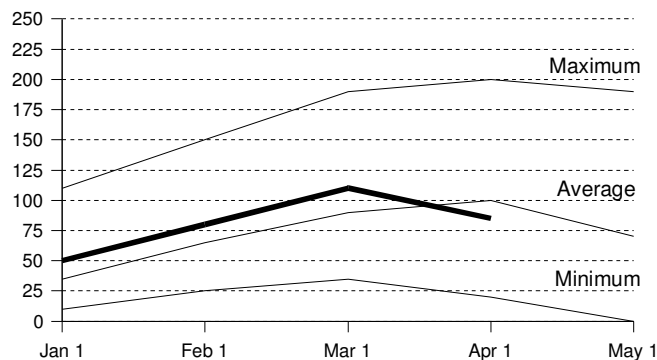
PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on this area was 105 percent of normal. Precipitation last month was about 50 percent of the monthly average. Seasonal precipitation at this time last year stood at 115 percent of normal.

RESERVOIR STORAGE - First of the month storage in 7 reservoirs was 2.6 million acre-feet which is 110 percent of average. About 85 percent of available capacity was being used. Storage in these reservoirs at this time last year was 105 percent of average.

RUNOFF - Seasonal runoff of streams draining the area totaled 10 million acre-feet which is 100 percent of the average for this period. Last year, runoff for the same period was 110 percent of average.

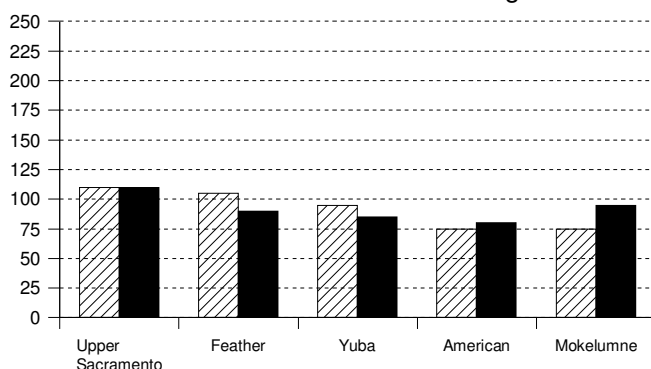
Snowpack Accumulation

Water Content in % of April 1 Average



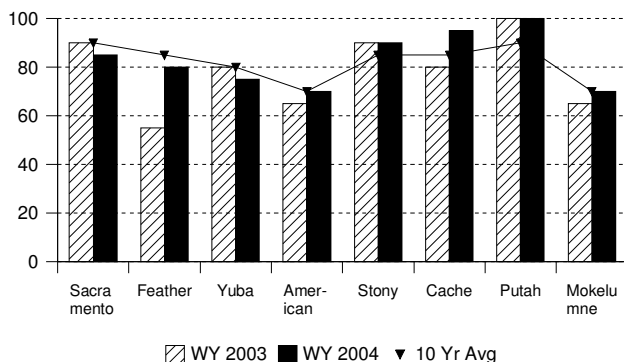
Precipitation

October 1 to date in % of Average



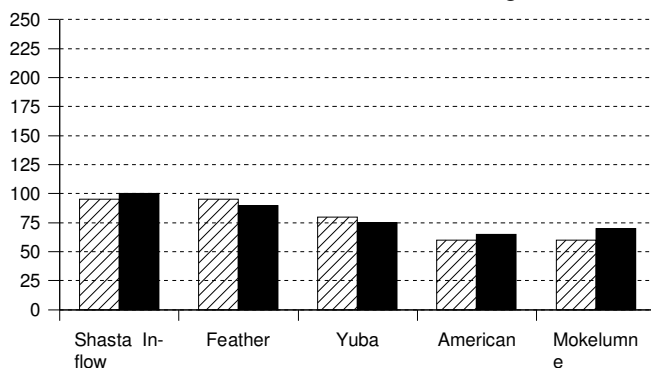
Reservoir Storage

Contents of major reservoirs in % of capacity



Runoff

October 1 to date in % of average



SACRAMENTO RIVER REGION

SNOWPACK- First of the month measurements made at 80 snow courses indicate an area wide snow water equivalent of 27.8 inches. This is 85 percent of the April 1 average. Last year at this time the pack was holding 21.7 inches of water.

PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on this area was 100 percent of normal. Precipitation last month was about 30 percent of the monthly average. Seasonal precipitation at this time last year stood at 100 percent of normal.

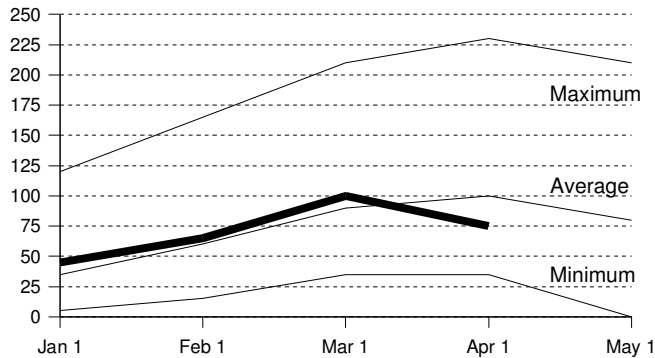
RESERVOIR STORAGE- First of the month storage in 43 reservoirs was 13.4 million acre-feet which is 110 percent of average. About 85 percent of available capacity was being used. Storage in these reservoirs at this time last year was 105 percent of average.

RUNOFF - Seasonal runoff of streams draining the are totaled 10.9 million acre-feet which is 95 percent of average for this period. Last year, runoff for the same period was 95 percent of average.

The **Sacramento Region 40-30-30 Water Supply Index** is forecast to be 8.0 assuming median meteorological conditions for the remainder of the year. This classifies the year as "above normal" in the Sacramento Valley according to the State Water Resources Control Board.

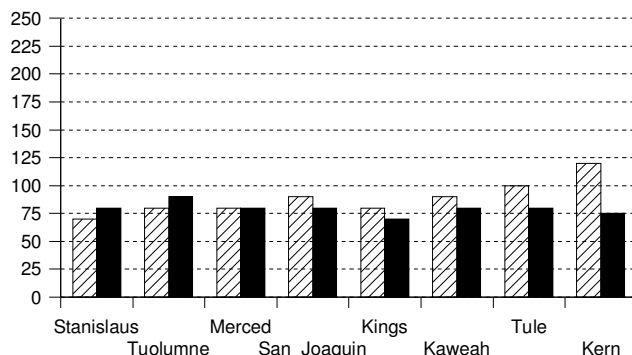
Snowpack Accumulation

Water Content in % of April 1 Average



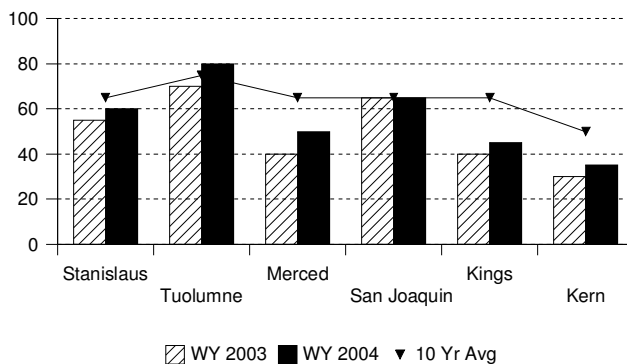
Precipitation

October 1 to date in % of Average



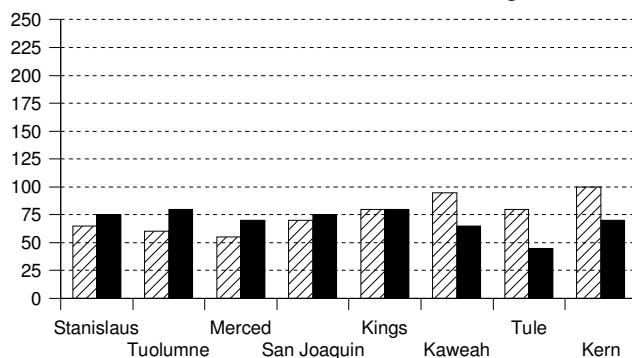
Reservoir Storage

Contents of major reservoirs in % of capacity



Runoff

October 1 to date in % of average



SAN JOAQUIN RIVER AND TULARE LAKE REGIONS

SNOWPACK- First of the month measurements made at 70 **San Joaquin Region** snow courses indicate an area wide snow water equivalent of 25.9 inches. This is 80 percent of the April 1 average. Last year at this time the pack was holding 20.8 inches of water.

At the same time 42 **Tulare Lake Region** snow courses indicated a basin-wide snow water equivalent of 17.0 inches which is 65 percent of the average for April 1. Last year at this time the basin was holding 15.1 inches of water.

PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the **San Joaquin Region** was 85 percent of normal.

Precipitation last month was about 30 percent of the monthly average. Seasonal precipitation at this time last year stood at 80 percent of normal.

Seasonal precipitation on the **Tulare Lake Region** was 80 percent of normal. Precipitation last month was about 35 percent of the monthly average. Seasonal precipitation at this time last year stood at 95 percent of normal.

RESERVOIR STORAGE- First of the month storage in 34 **San Joaquin Region** reservoirs was 8.2 million acre-feet which is 110 percent of average. About 70 percent of available capacity was being used. Storage in these reservoirs at this time last year was 100 percent of average.

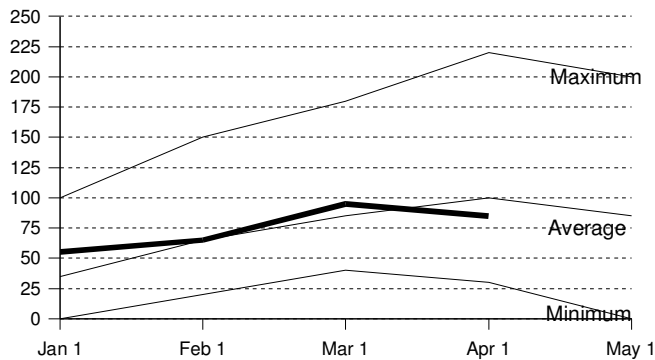
First of the month storage in 6 **Tulare Lake Region** reservoirs was 830 thousand acre-feet which is 90 percent of average and about 40 percent of available capacity. Storage in these reservoirs at this time last year was 85 percent of average.

RUNOFF- Seasonal runoff of streams draining the **San Joaquin Region** totaled 1.8 million acre-feet which is 70 percent of average for this period. Last year, runoff for the same period was 60 percent of average. Seasonal runoff of streams draining the **Tulare Lake Basin** totaled 627 thousand acre-feet which is 70 percent of average for this period. Last year runoff for this same period was 85 percent of average.

The **San Joaquin River Region 60-20-20 Water Supply Index** is forecast to be 2.5 assuming median meteorological conditions. This classifies the year as "dry" in the San Joaquin Region according to the State Water Resources Control Board.

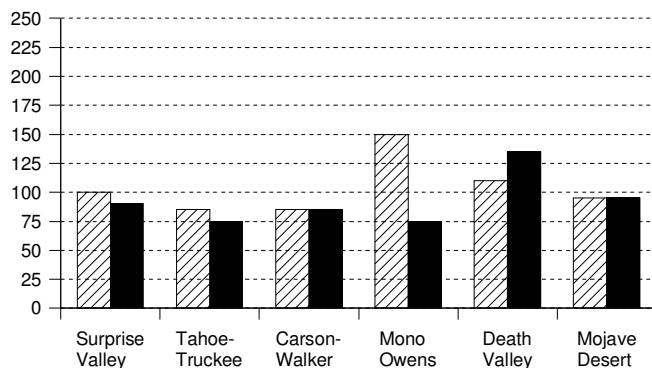
Snowpack Accumulation

Water Content in % of April 1 Average



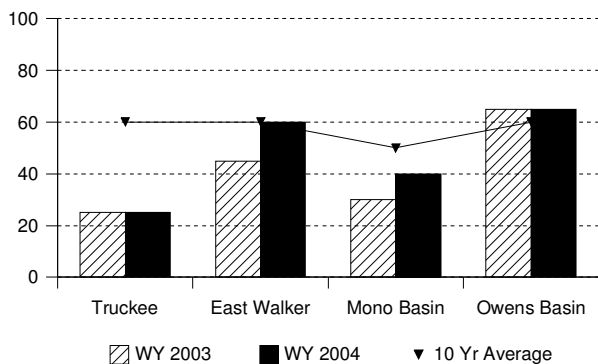
Precipitation

October 1 to date in % of Average



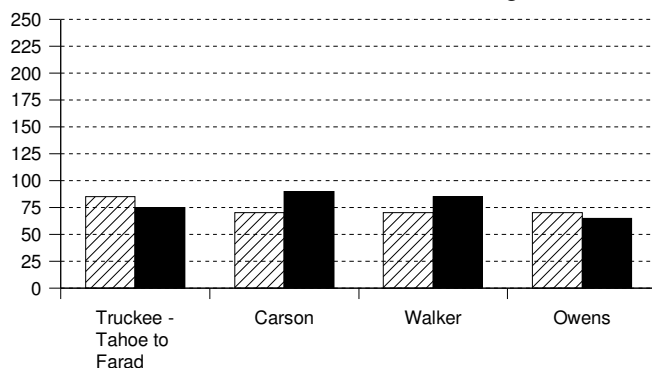
Reservoir Storage

Contents of major reservoirs in % of capacity



Runoff

October 1 to date in % of average



NORTH AND SOUTH LAHONTAN REGIONS

SNOWPACK- First of the month measurements made at 19 **North Lahontan** snow courses indicate an area wide snow water equivalent of 23.4 inches. This is 80 percent of the April 1 average. Last year at this time the pack was holding 21.1 inches of water. At the same time 21 **South Lahontan Region** snow courses indicated a basin-wide snow water equivalent of 17.8 inches which is 85 percent of the average for April 1. Last year at this time the basin was holding 16.9 inches of water.

PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the **North Lahontan** was 85 percent of normal. Precipitation last month was about 30 percent of the monthly average. Seasonal precipitation at this time last year stood at 90 percent of normal. Seasonal precipitation on the **South Lahontan** was 95 percent of normal. Precipitation last month was about 40 percent of the monthly average. Seasonal precipitation at this time last year stood at 115 percent of normal.

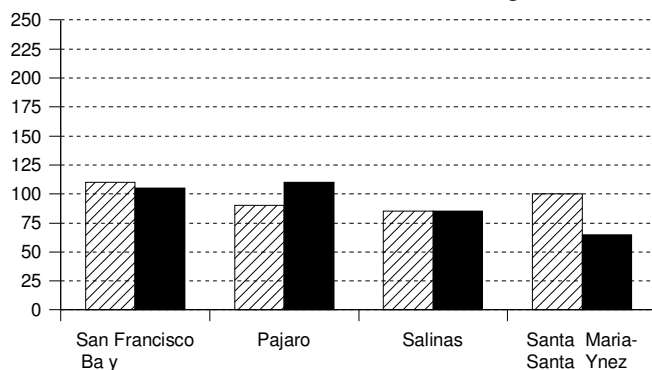
RESERVOIR STORAGE- First of the month storage in 5 **North Lahontan** reservoirs was 295 thousand acre-feet which is 50 percent of average. About 30 percent of available capacity was being used. Storage in these reservoirs at this time last year was 45 percent of average. Lake Tahoe was 0.9 feet above its natural rim on April 1. First of the month storage in 8 **South Lahontan** reservoirs was 264 thousand acre-feet which is 100 percent of average and about 65 percent of available capacity. Storage in these reservoirs at this time last year was 95 percent of average.

RUNOFF- Seasonal runoff of streams draining the **North Lahontan Region** totaled 244 thousand acre-feet which is 80 percent of average for this period. Last year, runoff for the same period was 75 percent of average.

Seasonal runoff of the Owens River in the **South Lahontan** totaled 46 thousand acre-feet which is 65 percent of average for this period. Last year runoff for this same period was 70 percent of average.

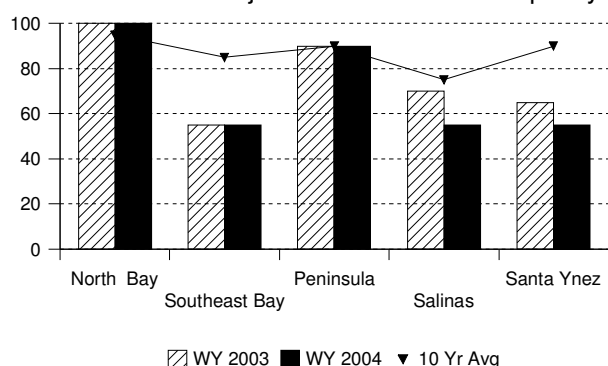
Precipitation

October 1 to date in % of Average



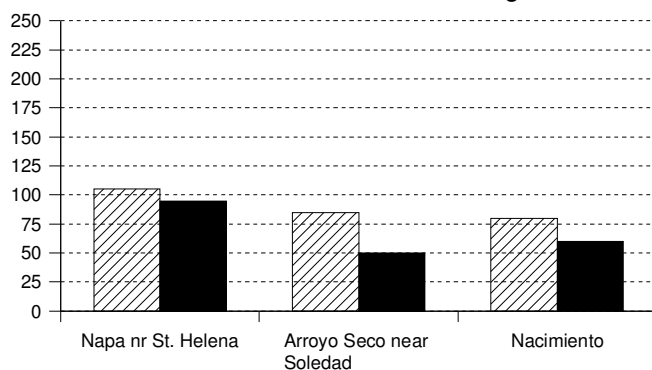
Reservoir Storage

Contents of major reservoirs in % of capacity



Runoff

October 1 to date in % of average



SAN FRANCISCO BAY AND CENTRAL COAST REGIONS

PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the **San Francisco Bay Region** was 110 percent of normal. Precipitation last month was about 30 percent of the monthly average. Seasonal precipitation at this time last year stood at 110 percent of normal.

Seasonal precipitation on the **Central Coast Region** was 85 percent of normal. Precipitation last month was about 25 percent of the monthly average. Seasonal precipitation at this time last year stood at 95 percent of normal.

RESERVOIR STORAGE - First of the month storage in 14 **San Francisco Bay Region** reservoirs was 372 thousand acre-feet which is 95 percent of average. About 70 percent of available capacity was being used. Storage in these reservoirs at this time last year was 90 percent of average.

First of the month storage in 6 **Central Coast Region** reservoirs was 552 thousand acre-feet which is 80 percent of average and about 55 percent of available capacity. Storage in these reservoirs at this time last year was 95 percent of average.

RUNOFF - Seasonal runoff of the Napa River in the **San Francisco Bay Region** totaled 66 thousand acre-feet which is 95 percent of average for this period. Last year, runoff for the same period was 105 percent of average.

Seasonal runoff of streams draining the **Central Coast Region** totaled 157 thousand acre-feet which is 55 percent of average for this period. Last year runoff for this same period was 80 percent of average.

SOUTH COAST AND COLORADO RIVER REGIONS

PRECIPITATION - October through March (seasonal) precipitation on the **South Coast Region** is 60 percent of normal. March precipitation was 25 percent of the monthly average. Seasonal precipitation at this time last year was 100 percent of normal. Seasonal precipitation on the **Colorado River-Desert Region** is 85 percent of normal. March precipitation was 110 percent of the monthly average. Seasonal precipitation at this time last year stood at 80 percent of average.

RESERVOIR STORAGE – March 31 storage in 29 major **South Coast Region** reservoirs is 1.3 million acre-feet or 85 percent of average. About 65 percent of available capacity is being used. Storage in these reservoirs at this time last year was 80 percent of average. On March 31 combined storage in Lakes Powell, Mead, Mohave and Havasu was about 27.6 million acre-feet or about 65 percent of average. About 50 percent of available capacity was in use. Last year at this time, these reservoirs were storing 80 percent of average.

RUNOFF - Seasonal runoff from selected **South Coast Region** streams totaled 12.8 thousand acre-feet which is 35 percent of average. Seasonal runoff from these streams last year was 45 percent of average.

COLORADO RIVER - The April -July inflow to Lake Powell is forecast to be 5.9 million acre-feet, which is 74 percent of average. The April 1 snowpack in the Colorado River basin above Lake Powell is 65 percent of average, highest in the San Juan at 85 percent and lowest in the Duchesne at 55 percent.

CENTRAL VALLEY PROJECT

As of March 31, 2004, CVP storage was 9.2 million acre-feet, which is the same as compared to one year ago and is approximately 112% of normal for that date.

The Bureau of Reclamation announced updated water year 2004 supply allocations for the CVP contractors on February 13, 2004. Based on a conservative water supply forecast prepared from information available March 1, 2004, and a water year inflow into Shasta Reservoir of 5.8 million acre-feet, water supply allocations remained unchanged. CVP water supplies were: Agricultural contractors North of Delta 100% and South of Delta 65%; Urban contractors North of Delta 100% and South of Delta 90%; Sacramento River water rights and San Joaquin Exchange Contractors 100%; Wildlife Refuges 100%; Friant Contractors 100% of Class 1 and 0% of Class 2. Updated allocations will be announced in mid-April.

The forecast of CVP operations is available on the Mid-Pacific Region's website at www.mp.usbr.gov

STATE WATER PROJECT

Total storage in the major SWP reservoirs was about 4.83 MAF on March 31, 2004, compared with 4.25 MAF at this time in 2003. On March 31 storage at Lake Oroville was about 3.09 MAF as compared to about 2.62 MAF last year. The State's share of San Luis Reservoir storage at the end of March was 1.07 MAF, as compared to about 986 TAF at this time last year. The combined storage of SWP's southern reservoirs was about 673 TAF on March 31 as compared to 636 TAF at this time last year.

SWP water deliveries through March 2004 were about 832 TAF. This is a combination of project, transfer, and exchange waters. This was about 210 TAF more than last year.

The Department's SWP allocation remained unchanged at 65% (2.68 MAF). Extremely warm conditions during March caused a large volume of runoff into Lake Oroville from early snowmelt, much of which had to be released for flood control requirements.

MAJOR WATER DISTRIBUTION PROJECTS

RESERVOIR STORAGE

(AVERAGES BASED ON 1951-2000 OR PERIOD RECORD)

| RESERVOIR | CAPACITY 1,000 AF | AVERAGE STORAGE 1,000 AF | 2003 1,000 AF | STORAGE AT END OF March 2004 1,000 AF | PERCENT AVERAGE | PERCENT CAPACITY |
|--------------------------------------------|----------------------|--------------------------------|------------------|------------------------------------------|--------------------|---------------------|
| <i>STATE WATER PROJECT</i> | | | | | | |
| Lake Oroville | 3,538 | 2,790 | 2,634 | 3,066 | 110% | 87% |
| San Luis Reservoir (SWP) | 1,062 | 984 | 985 | 1,067 | 108% | 100% |
| Lake Del Valle | 77 | 37 | 37 | 39 | 104% | 50% |
| Lake Silverwood | 73 | 66 | 69 | 70 | 107% | 97% |
| Pyramid Lake | 171 | 164 | 160 | 166 | 102% | 97% |
| Castaic Lake | 324 | 285 | 279 | 312 | 109% | 96% |
| Perris Lake | 132 | 118 | 123 | 122 | 104% | 93% |
| <i>CENTRAL VALLEY PROJECT</i> | | | | | | |
| Trinity Lake | 2,448 | 1,961 | 2,036 | 2,152 | 110% | 88% |
| Lake Shasta | 4,552 | 3,705 | 4,104 | 3,905 | 105% | 86% |
| Whiskeytown Lake | 241 | 213 | 207 | 206 | 97% | 85% |
| Folsom Lake | 977 | 622 | 620 | 707 | 114% | 72% |
| New Melones Reservoir | 2,420 | 1,452 | 1,425 | 1,496 | 103% | 62% |
| Millerton Lake | 520 | 348 | 465 | 440 | 126% | 85% |
| San Luis Reservoir (CVP) | 971 | 870 | 969 | 953 | 110% | 98% |
| <i>COLORADO RIVER PROJECT</i> | | | | | | |
| Lake Mead | 26,159 | 20,492 | 16,820 | 15,255 | 74% | 58% |
| Lake Powell | 25,002 | 19,064 | 13,600 | 10,180 | 53% | 41% |
| Lake Mohave | 1,810 | 1,679 | 1,686 | 1,677 | 100% | 93% |
| Lake Havasu | 619 | 556 | 541 | 536 | 96% | 87% |
| <i>EAST BAY MUNICIPAL UTILITY DISTRICT</i> | | | | | | |
| Pardee Res | 198 | 181 | 179 | 184 | 102% | 93% |
| Camanche Reservoir | 417 | 252 | 304 | 351 | 139% | 84% |
| East Bay (4 res.) | 147 | 135 | 132 | 141 | 104% | 96% |
| <i>CITY AND COUNTY OF SAN FRANCISCO</i> | | | | | | |
| Hetch-Hetchy Reservoir | 360 | 130 | 241 | 230 | 177% | 64% |
| Cherry Lake | 268 | 122 | 188 | 229 | 187% | 86% |
| Lake Eleanor | 26 | 12 | 8 | 20 | 170% | 76% |
| South Bay/Peninsula (4 res.) | 225 | 180 | 152 | 152 | 84% | 67% |
| <i>CITY OF LOS ANGELES (D.W.P.)</i> | | | | | | |
| Lake Crowley | 183 | 128 | 130 | 125 | 98% | 68% |
| Grant Lake | 48 | 28 | 19 | 23 | 83% | 48% |
| Other Aqueduct Storage (6 res.) | 83 | 77 | 64 | 55 | 71% | 66% |

TELEMETERED SNOW WATER EQUIVALENTS

April 1, 2004

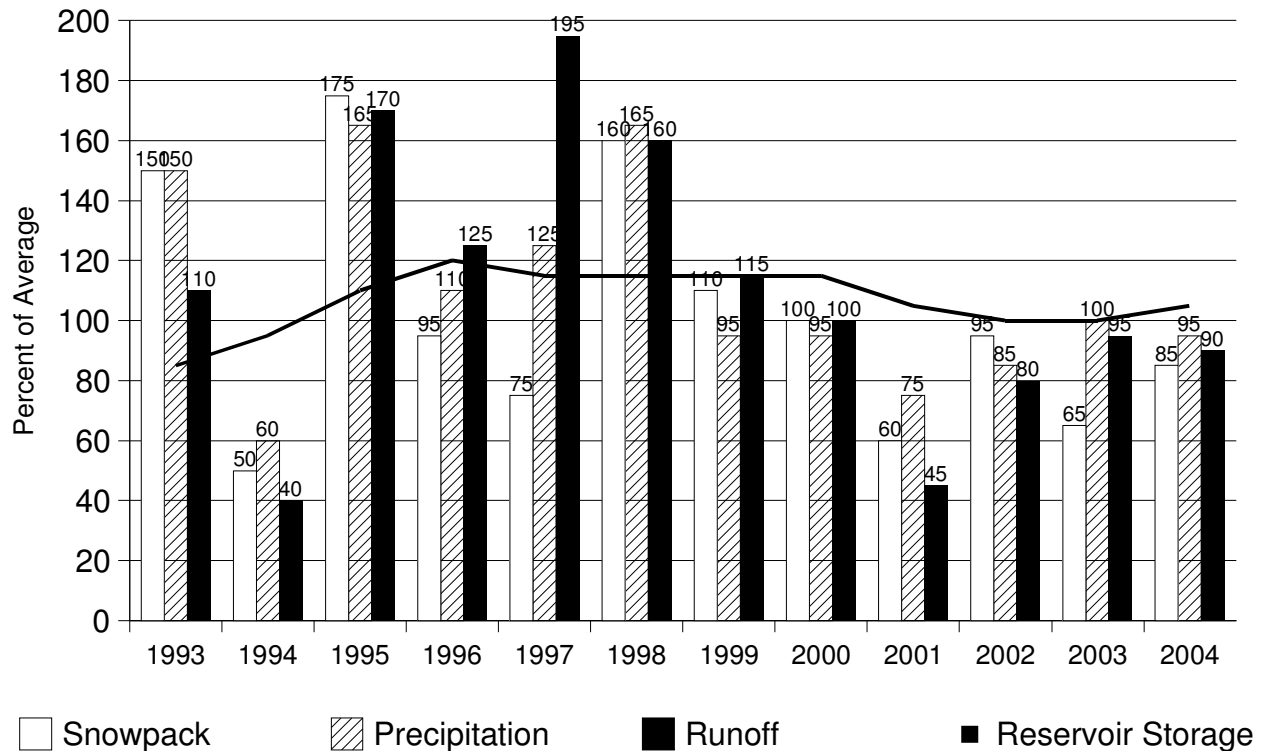
(AVERAGES BASED ON PERIOD RECORD)

| BASIN NAME | | INCHES OF WATER EQUIVALENT | | | | |
|-------------------------------|-------|----------------------------|-----------------------------|--------------------|--------------------|------|
| STATION NAME | ELEV | APRIL 1 AVERAGE | PERCENT Apr 1 OF AVERAGE | 24 HRS PREVIOUS | 1 WEEK PREVIOUS | |
| TRINITY RIVER | | | | | | |
| Peterson Flat | 7150' | 29.2 | 28.6 | 98.0 | 28.9 | 28.1 |
| Red Rock Mountain | 6700' | 39.6 | 55.1 | 139.1 | 55.8 | 53.8 |
| Bonanza King | 6450' | 40.5 | 44.8 | 110.5 | 45.0 | 44.0 |
| Shimmy Lake | 6400' | 40.3 | — | — | — | — |
| Middle Boulder 3 | 6200' | 28.3 | 29.7 | 105.0 | 31.0 | 31.0 |
| Highland Lakes | 6030' | 29.9 | — | — | — | — |
| Scott Mountain | 5900' | 16.0 | 24.0 | 150.0 | 24.1 | 23.8 |
| Mumbo Basin | 5650' | 22.4 | 30.9 | 137.8 | 31.1 | 31.1 |
| Big Flat | 5100' | 15.8 | 25.5 | 161.5 | 25.8 | 25.2 |
| SACRAMENTO RIVER | | | | | | |
| Cedar Pass | 7100' | 18.1 | 17.2 | 95.0 | 17.3 | 18.2 |
| Blacks Mountain | 7050' | 12.7 | 18.3 | 143.9 | 18.3 | 18.3 |
| Sand Flat | 6750' | 42.4 | 44.5 | 105.0 | 44.6 | 43.8 |
| Medicine Lake | 6700' | 32.6 | 41.6 | 127.7 | 41.8 | 40.0 |
| Adin Mountain | 6200' | 13.6 | 9.0 | 66.2 | 9.1 | 10.0 |
| Snow Mountain | 5950' | 27.0 | 32.3 | 119.6 | 32.6 | 31.9 |
| Slate Creek | 5700' | 29.0 | 27.0 | 93.1 | 28.2 | 27.5 |
| Stouts Meadow | 5400' | 36.0 | 43.6 | 121.2 | 44.0 | 42.6 |
| FEATHER RIVER | | | | | | |
| Kettle Rock | 7300' | 25.5 | 20.9 | 81.9 | 21.2 | 21.4 |
| Grizzly Ridge | 6900' | 29.7 | 22.3 | 75.2 | 22.7 | 22.8 |
| Pilot Peak | 6800' | 52.6 | 25.1 | 47.7 | 25.6 | 25.8 |
| Gold Lake | 6750' | 36.5 | 38.2 | 104.5 | 38.3 | 37.4 |
| Humbug | 6500' | 28.0 | 43.1 | 154.0 | 43.4 | 43.0 |
| Rattlesnake | 6100' | 14.0 | 21.0 | 150.0 | 21.6 | 21.4 |
| Bucks Lake | 5750' | 44.7 | 56.2 | 125.6 | 56.4 | 55.1 |
| Four Trees | 5150' | 20.0 | 23.0 | 115.2 | 24.0 | 24.8 |
| EEL RIVER | | | | | | |
| Noel Spring | 5100' | — | 0.0 | — | 0.0 | 0.0 |
| YUBA & AMERICAN RIVERS | | | | | | |
| Lake Lois | 8600' | 39.5 | 35.0 | 88.6 | 35.0 | 33.4 |
| Schneiders | 8750' | 34.5 | 36.0 | 104.4 | 36.2 | 35.8 |
| Caples Lake | 8000' | 30.9 | 24.1 | 78.0 | 24.8 | 25.3 |
| Alpha | 7600' | 35.9 | 21.8 | 60.7 | 22.5 | 23.1 |
| Meadow Lake | 7200' | 55.5 | 48.4 | 87.2 | 48.5 | 47.1 |
| Silver Lake | 7100' | 22.7 | 19.7 | 86.6 | 20.5 | 21.3 |
| Central Sierra Snow Lab | 6900' | 33.6 | 27.0 | 80.4 | 27.6 | 27.6 |
| Huysink | 6600' | 42.6 | 30.5 | 71.5 | 30.7 | 29.5 |
| Van Vleck | 6700' | 35.9 | — | — | — | — |
| Robbs Saddle | 5900' | 21.4 | 19.1 | 89.4 | 19.6 | 19.4 |
| Greek Store | 5600' | 21.0 | 20.9 | 99.4 | 21.0 | 21.0 |
| Blue Canyon | 5280' | 9.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Robbs Powerhouse | 5150' | 5.2 | 4.1 | 78.1 | 5.1 | 7.0 |
| MOKELUMNE & STANISLAUS RIVERS | | | | | | |
| Deadman Creek | 9250' | 37.2 | 24.5 | 65.9 | 24.5 | 24.6 |
| Highland Meadow | 8700' | 47.9 | 36.8 | 76.7 | 36.9 | 34.3 |
| Gianelli Meadow | 8400' | 55.5 | 34.1 | 61.4 | 34.2 | 33.3 |
| Lower Relief Valley | 8100' | 41.2 | 35.1 | 85.1 | 35.1 | 34.6 |
| Blue Lakes | 8000' | 33.1 | 27.0 | 81.6 | 27.0 | 25.9 |
| Mud Lake | 7900' | 44.9 | 44.2 | 98.4 | 44.5 | 44.1 |
| Stanislaus Meadow | 7750' | 47.5 | 39.4 | 83.0 | 40.3 | 40.6 |
| Bloods Creek | 7200' | 35.5 | — | — | — | — |
| Black Springs | 6500' | 32.0 | 28.5 | 88.9 | 28.7 | 27.1 |
| TUOLUMNE & MERCED RIVERS | | | | | | |
| Tioga Pass Entrance | 9945' | — | — | — | — | — |
| Dana Meadows | 9800' | 27.7 | 25.5 | 92.1 | 25.5 | 24.2 |
| Slide Canyon | 9200' | 41.1 | 40.6 | 98.8 | 40.6 | 38.0 |
| Lake Tenaya | 8150' | 33.1 | 25.5 | 77.0 | 25.5 | 25.7 |
| Tuolumne Meadows | 8600' | 22.6 | 15.9 | 70.5 | 15.9 | 15.6 |
| Horse Meadow | 8400' | 48.6 | 33.4 | 68.7 | 33.4 | 33.4 |
| Ostrander Lake | 8200' | 34.8 | 22.2 | 63.7 | 22.2 | 23.5 |
| Paradise Meadow | 7650' | 41.3 | 37.1 | 89.7 | 37.1 | 36.4 |
| Gin Flat | 7050' | 34.2 | 23.3 | 68.1 | 23.8 | 24.5 |
| Lower Kibbie Ridge | 6700' | 27.4 | 7.6 | 27.9 | 8.4 | 11.5 |

| BASIN NAME | | INCHES OF WATER EQUIVALENT | | | | |
|-----------------------|--------|----------------------------|-----------------------------|--------------------|--------------------|------|
| STATION NAME | ELEV | APRIL 1 AVERAGE | PERCENT Apr 1 OF AVERAGE | 24 HRS PREVIOUS | 1 WEEK PREVIOUS | |
| SAN JOAQUIN RIVER | | | | | | |
| Volcanic Knob | 10050' | 30.1 | 24.2 | 80.4 | 24.2 | 23.6 |
| Agnew Pass | 9450' | 32.3 | 23.7 | 73.5 | 23.7 | 21.8 |
| Kaiser Point | 9200' | 37.8 | 21.4 | 56.6 | 21.8 | 23.0 |
| Green Mountain | 7900' | 30.8 | 19.2 | 62.3 | 19.4 | 20.2 |
| Tamarack Summit | 7550' | 30.5 | 15.7 | 51.5 | 16.4 | 18.4 |
| Chilkoot Meadow | 7150' | 38.0 | 26.4 | 69.5 | 26.9 | 27.5 |
| Huntington Lake | 7000' | 20.1 | 12.4 | 61.5 | 12.5 | 13.2 |
| Graveyard Meadow | 6900' | 18.8 | 10.4 | 55.5 | 11.3 | 13.0 |
| Poison Ridge | 6900' | 28.9 | — | — | — | — |
| KINGS RIVER | | | | | | |
| Bishop Pass | 11200' | 34.0 | 28.5 | 83.8 | 28.5 | 27.9 |
| Charlotte Lake | 10400' | 27.5 | 29.9 | 108.7 | 30.1 | 30.1 |
| State Lakes | 10300' | 29.0 | 27.5 | 94.8 | 27.7 | 27.8 |
| Mitchell Meadow | 9900' | 32.9 | — | — | — | — |
| Blackcap Basin | 10300' | 34.3 | 23.5 | 68.5 | 23.5 | 23.0 |
| Upper Burnt Corral | 9700' | 34.6 | 28.2 | 81.5 | 28.2 | 26.2 |
| West Woodchuck Meadow | 9100' | 32.8 | 21.7 | 66.2 | 21.9 | 23.2 |
| Big Meadows | 7600' | 25.9 | 19.0 | 73.2 | 19.2 | 19.3 |
| KAWEAH & TULE RIVERS | | | | | | |
| Farewell Gap | 9500' | 34.5 | 27.6 | 80.0 | 27.6 | 28.5 |
| Quaking Aspen | 7200' | 21.0 | 10.9 | 52.0 | 11.8 | 14.4 |
| Giant Forest | 6650' | 10.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| KERN RIVER | | | | | | |
| Upper Tyndall Creek | 11400' | 27.7 | 20.1 | 72.6 | 20.1 | 20.2 |
| Crabtree Meadow | 10700' | 19.8 | 12.7 | 64.3 | 13.0 | 13.6 |
| Chagoopa Plateau | 10300' | 21.8 | 15.7 | 71.9 | 15.7 | 17.6 |
| Pascoes | 9150' | 24.9 | 23.5 | 94.4 | 23.5 | 25.1 |
| Tunnel Guard Station | 8900' | 15.6 | 3.5 | 22.4 | 3.9 | 6.9 |
| Wet Meadows | 8950' | 30.3 | — | — | — | — |
| Casa Vieja Meadows | 8300' | 20.9 | 13.1 | 62.8 | 13.8 | 15.1 |
| Beach Meadows | 7650' | 11.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| SURPRISE VALLEY AREA | | | | | | |
| Dismal Swamp | 7050' | 29.2 | 29.0 | 99.3 | 29.1 | 28.5 |
| TRUCKEE RIVER | | | | | | |
| Mount Rose Ski Area | 8900' | 38.5 | 34.5 | 89.6 | 34.5 | 32.8 |
| Independence Lake | 8450' | 41.4 | 44.1 | 106.5 | 44.1 | 43.2 |
| Big Meadows | 8700' | 25.7 | 17.0 | 66.1 | 17.2 | 17.4 |
| Squaw Valley | 8200' | 46.5 | 41.8 | 89.9 | 42.6 | 42.3 |
| Independence Camp | 7000' | 21.8 | 11.4 | 52.3 | 11.8 | 12.9 |
| Independence Creek | 6500' | 12.7 | 10.8 | 85.0 | 11.2 | 12.0 |
| Truckee 2 | 6400' | 14.3 | 13.1 | 91.6 | 13.5 | 14.8 |
| LAKE TAHOE BASIN | | | | | | |
| Heavenly Valley | 8800' | 28.1 | 19.0 | 67.6 | 19.8 | 20.4 |
| Hagans Meadow | 8000' | 16.5 | 8.0 | 48.5 | 8.6 | 10.0 |
| Marlette Lake | 8000' | 21.1 | 19.6 | 92.9 | 19.8 | 20.1 |
| Echo Peak 5 | 7800' | 39.5 | 32.7 | 82.8 | 33.2 | 33.7 |
| Rubicon Peak 2 | 7500' | 29.1 | 24.0 | 82.5 | 24.0 | 24.1 |
| Tahoe City Cross | 6750' | 16.0 | 3.0 | 18.8 | 3.5 | 5.7 |
| Ward Creek 3 | 6750' | 39.4 | 33.4 | 84.8 | 34.1 | 33.3 |
| Fallen Leaf Lake | 6250' | 7.0 | 0.0 | 0.0 | 0.0 | 1.2 |
| CARSON RIVER | | | | | | |
| Ebbetts Pass | 8700' | 38.8 | 33.0 | 85.1 | 33.5 | 33.8 |
| Poison Flat | 7900' | 16.2 | 11.0 | 67.9 | 11.7 | 13.6 |
| Monitor Pass | 8350' | — | 10.1 | — | 10.7 | 11.8 |
| Spratt Creek | 6150' | 4.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| WALKER RIVER | | | | | | |
| Leavitt Lake | 9600' | — | 57.3 | — | 57.3 | 55.3 |
| Virginia Lakes | 9300' | 20.3 | 16.1 | 79.3 | 16.1 | 15.3 |
| Lobdell Lake | 9200' | 17.3 | 12.0 | 69.4 | 12.2 | 13.2 |
| Sonora Pass Bridge | 8750' | 26.0 | 26.0 | 100.0 | 26.0 | 25.7 |
| Leavitt Meadows | 7200' | 8.0 | 4.4 | 55.0 | 5.1 | 7.3 |
| OWENS RIVER/MONO LAKE | | | | | | |
| Gem Pass | 10750' | 31.7 | 32.4 | 102.2 | 32.7 | 32.7 |
| Sawmill | 10200' | 19.4 | 14.6 | 75.2 | 14.6 | 14.6 |
| Cottonwood Lakes | 10150' | 11.6 | 8.5 | 73.4 | 9.0 | 10.6 |
| Big Pine Creek | 9800' | 17.9 | 13.9 | 77.7 | 13.9 | 14.6 |
| South Lake | 9600' | 16.0 | 13.2 | 82.5 | 13.2 | 13.2 |
| Mammoth Pass | 9300' | 42.4 | 33.6 | 79.2 | 33.8 | 32.8 |
| Rock Creek Lakes | 10000' | 14.0 | 8.2 | 58.3 | 8.5 | 9.6 |

| NORMAL SNOWPACK ACCUMULATION EXPRESSED AS A PERCENT OF APRIL 1ST AVERAGE | | | | | | |
|--------------------------------------------------------------------------|---------|----------|-------|-------|-----|--|
| AREA | JANUARY | FEBRUARY | MARCH | APRIL | MAY | |
| Central Valley North | 45% | 70% | 90% | 100% | 75% | |
| Central Valley South | 45% | 65% | 85% | 100% | 80% | |
| North Coast | 40% | 60% | 85% | 100% | 80% | |

April 1 Statewide Conditions



SNOWLINES

Remember that this year's Western Snow Conference meeting is April 19-22 in Richmond, British Columbia. For further information regarding the Western Snow Conference contact Frank Gehrke at 916-574-2635 or gridley@water.ca.gov. Registration and program information is available on the web at <http://www.westernsnowconference.org/>

Continuing with the Gene Rose collection are depicted two snow surveyors, most likely in the San Joaquin drainage. The equipment is looking more modern with current equipment using a tubular as opposed to the dial scale shown hanging from the pole in the right side of the photograph.